

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Gorringe *et al.*

National Phase of PCT/GB99/02828

Filed: To Be Assigned

For: **Superoxide Dismutase as a Vaccine
Antigen**

Art Unit: To Be Assigned

Examiner: To Be Assigned

Atty. Docket: 1581.0780000/RWE/CEJ

Information Disclosure Statement

Commissioner for Patents
Washington, D.C. 20231

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. A copy of each of these documents is provided.

Documents AL1 and AM1 are in a foreign language. The significance of Documents AL1 and AM1 can be ascertained by reference to the International Search Report for PCT/GB99/02828, cited as document AR1.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith. It is further understood that the Examiner will consider information that had been cited or submitted to the U.S. Patent and Trademark Office in a prior application relied on under 35 U.S.C. § 120. 1138 OG 37, 38 (May 19, 1992).

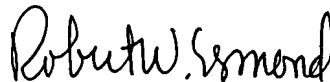
This Information Disclosure Statement is being filed within three months of the U.S. filing date. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and to indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



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Date: Feb 27, 2001

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FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

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U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL1	DE 40 38 563	06/11/1992	Germany			Yes No
	AM1	WO 92/19224	11/12/1992	WIPO			Yes No
	AN1	WO 97/17063	05/15/1997	WIPO			Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AR	1	International Search Report of International Application No. PCT/GB99/02828, mailed February 4, 2000.
AS	1	Patent Abstracts of Japan, abstract of Japanese Patent No. JP 04 074134, published March 9, 1992.
AT	1	Derwent WPI, English language abstract of Japanese Patent No. JP 04 327541, published November 17, 1992.

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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>2</u>	Derwent WPI, English language abstract of German Patent No. DE 40 38 563, published June 11, 1992.
	AS	<u>2</u>	Alcendor, D.J. <i>et al.</i> , "Isolation, sequencing and expression of the superoxide dismutase-encoding gene (<i>sod</i>) of <i>Nocardia asteroides</i> strain GUH-2," <i>Gene</i> 164:143-147, Elsevier Science B.V.(1995).
	AT	<u>2</u>	Beaman, L. and Beaman, B.L., "Monoclonal Antibodies Demonstrate that Superoxide Dismutase Contributes to Protection of <i>Nocardia asteroides</i> within the Intact Host," <i>Infection and Immunity</i> 58:3122-3128, American Society for Microbiology (1990).

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	AR	3	Farrant, J.L. <i>et al.</i> , "Bacterial copper- and zinc-cofactored superoxide dismutase contributes to the pathogenesis of systemic salmonellosis," <i>Molecular Microbiology</i> 25:785-796, Blackwell Science Ltd (1997).
	AS	3	Kroll, J.S. <i>et al.</i> , "Bacterial [Cu,Zn]-superoxide dismutase: phylogenetically distinct from the eukaryotic enzyme, and not so rare after all," <i>Microbiology</i> 141:2271-2279, Society for General Microbiology (1995).
	AT	3	Langford, P.R. and Kroll, J.S., "Distribution, cloning, characterisation and mutagenesis of <i>sodC</i> , the gene encoding copper/zinc superoxide dismutase, a potential determinant of virulence, in <i>Haemophilus ducreyi</i> ," <i>FEMS Immunology and Medical Microbiology</i> 17:235-242, Elsevier Science Ltd (1997).

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	AR	4	Langford, P.R. <i>et al.</i> , "Cloning and Molecular Characterization of Cu,Zn Superoxide Dismutase from <i>Actinobacillus pleuropneumoniae</i> ," <i>Infection and Immunity</i> 64:5035-5041, American Society for Microbiology (1996).
	AS	4	Pesce, A. <i>et al.</i> , "Unique Structural Features of the Monomeric Cu,Zn-Superoxide Dismutase from <i>Escherichia coli</i> , Revealed by X-ray Crystallography," <i>Journal of Molecular Biology</i> 274:408-420, Academic Press, Inc. (1997).
	AT	4	Tabatabai, L.B. and Pugh, G.W., Jr., "Modulation of immune responses in Balb/c mice vaccinated with <i>Brucella abortus</i> Cu-Zn superoxide dismutase synthetic peptide vaccine," <i>Vaccine</i> 12:919-924, Elsevier Science Ltd (1994).

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	AR	5	Wilks, K.E. <i>et al.</i> , "Periplasmic Superoxide Dismutase in Meningococcal Pathogenicity," <i>Infection and Immunity</i> 66:213-217, American Society for Microbiology (1998).
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